

Name \_\_\_\_\_

## Unveiling the Antibiotic Arsenal: Exploring the Main Types of Antibiotics

### Open-Ended Response Answer Key

1. One advantage of using penicillins is their effectiveness against a wide range of bacterial infections, while one disadvantage is the potential for allergic reactions in some individuals.
2. Cephalosporins differ from penicillins in their mechanism of action by having a broader spectrum of activity and greater resistance to bacterial enzymes that can break down penicillins.
3. It's important for antibiotics to have different mechanisms of action to prevent the development of bacterial resistance and ensure that antibiotics remain effective against a variety of bacterial infections.
4. One potential consequence of bacterial resistance to tetracyclines is the limited treatment options available for infections caused by resistant bacteria, leading to prolonged illness and increased risk of complications.

